We claim:

1.   A method of determining noise in a CATV channel, the CATV channel comprising a predetermined frequency band, the CATV channel being in-service when a transmitted carrier signal having a frequency in the predetermined frequency band is present, the method comprising:

      a)   obtaining a television signal corresponding to a predetermined CATV channel, the television channel comprising a carrier signal modulated by an information signal;

      b)   sampling at least a part of the television signal to produce a digital signal segment, said digital signal segment comprising a noise signal component and an information signal component, wherein said information signal component has a substantially predetermined signal pattern;

      c)   obtaining an estimate of the information signal and subtracting the estimate from the baseband signal, thereby producing a noise signal estimate.

2.   The method of claim 1 wherein the noise signal includes at least CTB noise and hum noise, and further comprising step e) of processing the noise signal estimate to obtain a measurement of CTB noise by obtaining a noise measurement from said noise signal estimate and substantially reducing a portion of the noise measurement that is attributable to hum noise.

3.   The method of claim 2 wherein step e) further comprises obtaining the noise measurement by first generating a frequency response of the noise signal estimate, wherein the frequency response comprises a plurality of frequency bins, each representative of an energy of

the noise signal component within a predetermined frequency band.

4.   The method of claim 3 wherein step e) further comprises performing a discrete Fourier transform to generate the frequency response of the noise signal estimate.

5.   The method of claim 3 wherein step e) further comprises removing at least one frequency bin in which substantially all of the portion of the noise measurement that is attributable to hum noise is located in order to substantially reduce the portion of the noise measurement that is attributable to hum noise.

6.   The method of claim 3 wherein step e) further comprises employing a digital filter to substantially reduce the hum noise in the noise signal estimate before obtaining the noise measurement.

7.   A method of determining noise in a television signal, the television signal comprising a baseband signal modulated onto the carrier signal, the method comprising:

   a)   obtaining a digital signal segment comprising a baseband component, said baseband component further comprising a noise signal component and an information signal component, the information signal component having a substantially predetermined signal pattern;

   b)   obtaining an estimate of the information signal and subtracting the estimate from the baseband signal, thereby producing a noise signal estimate;

   c)   obtaining a noise measurement by first generating a frequency response of the

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noise signal estimate, wherein the frequency response comprises a plurality of frequency bins, each representative of an energy of the noise signal component within a predetermined frequency band;

    d)   employing a digital filter to substantially reduce the hum noise in the noise signal estimate; and

    e)   processing the frequency response to obtain a measurement of one of CTB noise or CSO noise.

8.   The method of claim 7 wherein step e) further comprises:

    processing the noise signal estimate to obtain a first measurement of CTB noise and snow noise by obtaining a noise measurement for a range of frequencies in the noise signal estimate that correspond to the frequencies in which CTB noise is located; and

    processing the first measurement by substantially reducing a portion of the noise measurement that is attributable to snow noise.

9.   The method of claim 8 wherein step e) further comprises:

    determining a snow noise measurement using one or more frequency bins corresponding to a frequency band in which substantially only snow noise is present; and

    using the determined snow noise measurement to subtract the portion of the first measurement that is attributable to snow noise.